Sex, Techs & HIV

A report of the HIV response in a national sample of trade apprentices

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ISBN 1-875978-24-0

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Monograph 5/1999

The National Centre in HIV Social Research is funded b Commonwealth Department of Health and Aged Care throug Australian National Council on AIDS and Related Diseases (A and is affiliated with the Faculty of Arts & Social Sciences University of New South Wales.

ACKNOWLEDGEMENTS

I would like to thank Juliet Richters for her editorial contribution, and Associate Professor Susan Kippax and Dr Alan Taylor for their supervision of the original project. To the administrative staff, teachers and apprentices of the Technical Colleges of Australia my sincerest gratitude for their time and co-operation. I was impressed with your dedication and skill in your professions, and generosity with your time. Particular thanks must also go to Jim Jamieson, Barry Nicholls, Tom McDonnell, Paul King and Hans Schings for being more than helpful and making me feel welcome rather than a nuisance (and for the delicious offerings from the college kitchens). A special thank-you to my research assistants Evan Smith, Tom Barnes, Ron Parker, William Wilkie, Simon Canny, Stephen Lawson, Bruno Bouchet and Jo Eliott, for working tirelessly in the absence of supervision and remaining professional under sometimes trying conditions. Finally, of course, my greatest debt is to the apprentices who took part in the interviews and surveys - a thousand thanks. I hope all your aspirations are well met and your enthusiasm remains strong.

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1. INTRODUCTION

This report is based on data collected for a PhD thesis submitted in August 1998 (Grunseit, 1998). The data described here are intended as a resource for both researchers and workers in the field of young people's sexual health in Australia. The intention is to provide some key indicators of HIV-response.

1.1Background

The original project was designed to examine the resonances between gender as it is constructed in the occupational setting and the HIV-response of young people. Data were generated through a large-scale national survey of Technical and Further Education (TAFE) apprentices in the occupational streams of hairdressing, automotive, and commercial cookery.[1] A total of 4283 apprentices from 52 colleges across all states and territories of Australia completed the survey. This report presents some main indices on HIV-related issues drawn from this database.

1.2Structure of report

The procedure followed to generate the sample is described in Appendix 1. The four sections below cover HIV knowledge, HIV-related attitudes, sexual practices, and other indicators pertinent to HIV prevention. Each section provides descriptive statistics of the variables of interest across sex, region of college, and state of residence (e.g., new South Wales, Tasmania etc.). A small subset of these variables have also been analysed in multiple variable models to gauge their association with a number of factors such as gender, religious affiliation, and educational background.[2] The results of these analyses are briefly discussed in terms of their relevance for HIV prevention for young people, and are summarised in the final section of the report.

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[1] These streams were selected for reason relating to the theoretical framework used in the thesis rather than any interest in the HIV risk in these particular groups.

[2] Background variables were determined by univariate analyses that are not detailed in this report.

2. METHODOLOGY

2.1 Rationale for population selection

Australian research on young people and HIV has been compromised by the limited samples from which data have been collected. Sampling has been confined either to specific geographic areas, populations with low sexual activity (e.g., high school students), or to socially homogeneous and perhaps privileged groups (e.g., university students). To address these limitations in previous research students from Technical and Further Education (TAFE) institutions in all states and territories of Australia were selected. As entry into many of the courses offered at TAFE does not require completion of year 12 at school, and the fees are considerably lower than those of private colleges or universities, students are likely to come from a broader range of socioeconomic strata. Further, there is some evidence to suggest that this population may have a higher rate of sexual activity than school or university groups (Michaud, Narring, Dubois-Arber & Paccaud, 1993). Whereas a significant proportion of previous research has been limited to the most populous states, this survey took in all states and both urban and non-urban areas.

TAFE course handbooks for 1994/1995 for all states and territories were obtained (Canberra Institute of Technology, 1994; Department of Education Victoria, 1993; Department of Employment, Industrial Relations and Training Tasmania, 1994; Department for Employment, Training and Further Education South Australia, 1994; Department of Employment, Vocational Education and Training Western Australia, 1993; Northern Territory Department of Education, 1993; TAFE NSW, 1993; TAFE-TEQ, 1993). In line with the theoretical requirements of the thesis, course selection was informed in the first instance by commonly circulating gender stereotypes and by the gender distribution in course enrolment (see Footnote 1). In the second instance, the other criteria were: The course was at least two years in length (in order to be able to compare those just entering the course with those who had been in it for at least a year); the course had no educational pre-requisites except for standard schooling; enrolment in the course throughout Australia; it was of sufficient size and was offered in many colleges in both urban and regional areas to enable valid statistical tests. Further, for reasons of comparability, all of the courses chosen were to have equivalent

requirements in terms of prerequisite level of education, hours of attendance per year and type of attainment (e.g., diploma, trade certificate) had to be similar across states and territories. The apprenticeships of hairdressing, motor mechanics (light vehicles only) and commercial cookery satisfied these requirements.

2.2 Description of the sample

Apprentices ranged in age from 15 years[3] to 56 years of age. The average age of those apprentices below 24 years was 18 and a half. For 90.8% of the apprentices English was the spoken language at home; the next most frequently used language was Italian, at 1.7%. Ninety-one percent of apprentices were born in Australia; the next most frequent birthplace was the United Kingdom, at 1.9% of the total sample. These statistics reflect the language and birthplace ranking for the general Australian population as at 1996 (Australian Bureau of Statistics, 1998). The survey did not ask for Indigenous Australian identity. The number of indigenous Australians participating in the survey was likely to be small as the Northern Territory—which has the highest proportion of indigenous people (26.4% of state population compared with an average of 1.71% in other states (McLennan, 1996)—had a separate college for indigenous TAFE students which was not surveyed.

For the purposes of making policy, the NSW Department of Health defines 'youth' as people aged between 12 and 24 years. Therefore the analyses in this project were restricted to students aged 24 years or less at the time of the survey (n=4036, 94.4% of total sample). This did not appear to be consequential to the weighting of the sample.

Table 1: Summary of comparisons across apprenticeships of demographic data for apprentices aged 24 years or under

Variable	n	cooks	mechanics	hairdressers	P-value[1]
Apprenticeship stage (% stage 1)	3997	57.2	48.4	58.2	.217
Birthplace (% born in Australia)	3994	91.4	93.8	91.7	.437
Language spoken at home (% English)	4002	92.1	89.8	92.6	.704
Region (% in capital cities)	4008	71.6	75.1	74.7	.933

[3] One student indicated an age of 13 years, but this was likely to be an error, as students in Australia are not permitted to leave school until 14 years and 9 months of age.

Highest education (% year 12)	3983	53.9	43.6	30.2	.001
Religious affiliation (% no religion)	3888	29.5	31.6	24.9	.087
Religion importance (% very important)	3837	7.0	9.9	12.4	.001
Church attendance (% weekly)	3837	5.7	8.1	9.0	.026
Living arrangements (% with parents)	3996	61.8	83.0	76.6	.001
Age (mean in years)	4008	18.9	18.4	18.0	.001
Months in job (mean in months)	3775	12.0	8.9	10.2	.026
Years since left school (mean in years)	3859	2.8	2.4	2.4	.003

Note: For further details regarding descriptive statistics across all levels of these demographic variables.

[1] Significance of omnibus F-test for difference across apprenticeship

3. KNOWLEDGE

3.1Young people's knowledge about HIV

Knowledge about HIV is an important precondition for preventive action in HIV transmission. There is evidence in the literature addressing young people's knowledge of HIV that it may vary with level of cognitive development and social opportunity—e.g., through education and ethnicity. Gender, ethnicity and age should be considered when reporting levels of HIV knowledge among youth populations, but there is considerable variation in the extent to which knowledge varies with these factors.

In general, there is evidence that young people from English-speaking backgrounds are knowledgeable about HIV: the majority of studies published since 1990 quote overall accuracy rates of between 70% and 95%. There is also evidence that accuracy varies according to which aspects of HIV are taken to represent knowledge. For example, many studies describe young people's tendency to overestimate the risk of infection from blood donation (Dekin, 1996; Kaul & Stephens, 1991) and being coughed or sneezed on by an HIV-positive person (Andre & Bormann, 1991; Hardy, 1990; Lamport & Andre, 1993). Medical manifestations of HIV disease are also poorly understood by young people (Fisher & Misovich, 1990; McCormack, Anderton & Barbieri, 1993; Mech & Pryde, 1994). However, knowledge that HIV is sexually transmitted is well known (Dunne, Donald, Lucke, Nilsson et al., 1993; Koniak-Griffin & Brecht, 1997; Lindsay, Smith & Rosenthal, 1997; Turtle, Ford, Habgood, Grant, Bekariaris, Constantinou, Macek & Polyzoidis, 1989; Rodden, Crawford, Kippax & French, 1996). Young people are also well aware that condoms may be used in the prevention of HIV infection (Denman, Pearson, Davis & Moody, 1996; Lindsay et al., 1997; Singh, Zemitzsch, Ellis, Best & Singh, 1994; Skurnick, Johnson, Quinones, Foster & Lorris, 1991).

A pattern of knowledge and misinformation similar to that described above was found in this sample of trade apprentices. Table 2 below gives the proportions of apprentices responding Yes, No and Don't know to a series of statements designed to access their knowledge of HIV. Questions were grouped together to constitute five knowledge subscales or factors described below. A total score was calculated by adding the scores over all 19 questions.

Table 2: Knowledge questions and proportion answering Yes, No and Don't know, according to 5 factors extracted from the HIV knowledge scale

Factor	Question	Yes	No	Don't know
K-1	Could a man get HIV from having sex with a heterosexual woman?	90.1	3.6	6.4
K-1	Could a man become infected with HIV by having sex with a bisexual woman?	87.7	2.8	9.5
K-1	Can a woman get HIV through having sex with a heterosexual man?	93.3	2.4	4.2
K-1	Could a woman become infected with HIV by having sex with a bisexual man?	90.3	1.8	7.9
K-2	If a person gets HIV through sharing needles, can they pass it on to someone else through sex?	96.3	.7	3.0
K-2	Once a person is infected with HIV, can they pass it on to someone else for the rest of their life?	86.9	3.6	9.5
K-2	If a woman with HIV is pregnant, could her baby become infected with HIV?	90.9	1.6	7.5
K-2	Can a person get HIV by sharing a needle and syringe with someone else while injecting speed?	97.3	1.92	.8
K-2	Could someone who looks healthy be infected with HIV?	96.2	1.2	2.6
K-3	Can a person catch HIV from mosquitoes?	10.5	62.3	27.2
K-3	Can a person be infected with HIV while donating blood?	38.5	43.7	17.8
K-3	If a person is infected with HIV, will it always show up on an HIV-antibody test (AIDS test)?	30.4	30.5	39.0
K-3	Is having HIV the same as having AIDS?	29.9	5.4	16.1
K-3	Could a person get HV from sharing a cup or cutlery with someone who is infected with HIV?	4.3	85.7	9.9
K-4	Should a person squeeze the end/tip of a condom before putting it on a man's penis?	71.4	11.5	17.1
K-4	Is Vaseline a good lubricant for using with condoms?	17.6	57.7	24.7
K-4	Does the birth control pill protect a person from getting HIV	2.9	33.7	41.5
K-5	Is it a law that people who have HIV have to tell their sexual partners that they are infected?	32.2	33.3	23.3
K-5	Is it a law that people who have HIV have to tell their employer that they are infected?	24.7	33.7	41.5

Table 2 shows a variation in accuracy depending on the aspect of HIV being queried. Accuracy was greater for questions about transmission modes that do transmit HIV than for questions about casual contact, which does not. Further, substantially less than one-half of the apprentices under 24 knew the laws pertaining to disclosure to sexual partners and employers in their state. But though apprentices' knowledge was incomplete, they were clearly aware that HIV is transmitted sexually.

3.1.1 Knowledge factors

Factor 1 comprised four questions relating to the transmission of HIV through heterosexual sex with heterosexual male and female partners, and bisexual male and female partners: Sexual Transmission Knowledge (K-1). The second factor also concerned the transmission of HIV, this time from non-sexual routes such as through needle use and perinatally: Non-Sexual Transmission Knowledge (K-2). The third factor, Social Contact and General Knowledge (Factor K-3) appears to group knowledge of the risk associated with non-risk activities—sharing cutlery, donating blood or through mosquitoes—with general knowledge about HIV infection. The fourth factor comprised three questions about prevention: Transmission Prevention (Factor K-4). The final factor included items relating specifically to laws regarding the obligation of people infected with HIV to disclose their HIV status to their employer(s) and the sexual partner(s): Knowledge of Laws (Factor K-5).

Both details of the apprentices' knowledge of HIV according to these subscales, and the total knowledge scale are given in Tables 3 and 4 below. From these tables, there appear to be few differences in HIV levels of knowledge between male and female students and rural and urban students, or between the different states of Australia. As suggested by the individual question scores, knowledge of sexual and other known modes of transmission is high, but accuracy on transmission risk by social contact is still poor.

Table 3: Proportion correct on knowledge subscales K-1 to K-5, and total knowledge score (maximum 19) for male and female apprentices from capital city and non-capital city colleges

Factor	Men	Women	Capital City	Non-capital city
K-I	89.1	90.8	89.1	91.6
K-2	92.8	93.9	92.9	94.3
K-3	54.3	55.8	54.7	55.5
K-4	74.1	72.1	72.5	75.9
K-5	33.0	32.9	32.9	33.1
Total (max 19)	13.8	13.9	13.8	14.1

Table 4: Proportion correct on knowledge subscales K-1 to K-5, and total knowledge score (maximum 19) across all states and territories of Australia

Factor	ACT	NSW	NT	QLD	SA	TAS	VIC	WA

K-2	92.6	93.6	93.9	94.4	92.4	92.0	93.1	92.8
K-3	56.5	55.4	53.1	60.5	54.0	59.6	52.9	52.1
K-4	77.6	73.5	77.3	77.6	72.7	75.9	72.4	69.9
K-5	36.1	34.5	29.9	32.4	33.8	44.9	31.8	27.6
Total (max 19)	14.1	13.9	13.7	14.5	13.6	14.3	13.7	13.5

3.1.2 Multiple variable analyses

The total knowledge score was regressed on a number of demographic and background variables: the results are shown in Table 5 below. Only those variables that were significantly associated with total HIV knowledge in univariate analysis were included in the model.

Table 5: Results of full multiple regression of total HIV knowledge scores for all apprentices aged 24 years or younger

Independent variable (reference category)	B	t*	P-value
Sex Male respondent)	.11	1.02	.310
Education (less than year 10)		F=16.81	<.001
Year 10	.86	2.59	.036
Year 11	1.23	3.41	.001
Year 12	1.76	4.38	<.001
Religion (has a religion)		F=10.98	<.001
Don't wish to say	-1.05	-4.01	<.001
No religion	.11	0.96	.683
Living arrangements (with parents)		F=5.99	<.001
Alone	.63	3.09	.012
With partner	.29	1.63	.433
With friends	.53	4.37	<.001
Combination household	.37	1.68	.389
Language spoken at home (English)	-.99	-5.16	<.001
Had HIV education at school (no education)	.84	8.36	<.001
Had intercourse (not had intercourse)	.88	7.32	<.001
Age	.13	2.66	.010

Notes: Model significance $F_{14,50}$=35.44, p <.001, R^2=12.7%.

t*—t is derived from original coefficient of the category versus the reference category and its standard error

As may be seen in Table 5 above, male and female apprentices were comparable on the total HIV knowledge scale. However, being coitally experienced, completing Year 10 or higher at school, living with friends rather than parents, and (reassuringly) having HIV education at school, were all associated with higher knowledge scores (all P=.001). Apprentices speaking a language other than English at home and those who chose not to declare their religious (compared with those who did), however, had on average lower HIV knowledge scores (P<.001)

3.2 Relationship between knowledge and practice

Table 6: Bivariate relationship between total knowledge scores and scores on five knowledge subscales with use of condoms at first and most recent intercourse for all apprentices aged 24 years or younger

Dependent variable	Independent variable	Odds Ratio*	P-value
Used a condom at first intercourse	Total HIV knowledge	.99	.902
	Knowledge factor K-5	.76	.098
	Knowledge factor K-2	.74	.294
	Knowledge factor K-3	.91	.506
	Knowledge factor K-4	1.23	.123
	Knowledge factor K-5	1.19	.276
Used a condom at last intercourse	Total HIV knowledge	.98	.359
	Knowledge factor K-5	.79	.365
	Knowledge factor K-2	.49	.019
	Knowledge factor K-3	.90	.617
	Knowledge factor K-4	.93	.699
	Knowledge factor K-5	.99	.916

Note: *Odds ratio: this is a ratio of two sections of the population, and measures the strength of association for cohort studies.

As may be seen by the bivariate regression results displayed in Table 6, HIV knowledge, both as a global measure and as factors, was not significantly associated with condom use. This was true for both condom use at first and at most recent intercourse. The only analysis that approached significance was the relationship between knowledge of non-sexual modes of transmission. This marginal result (P=.019, Table 6) indicated that with each unit increase of knowledge, there was a halving of the odds of a condom being used at last intercourse. However, as already stated, this result was not significant at the 1% level. This is in keeping with other research on Australian students (Rodden, Crawford, Kippax & French, 1996; Turnbull, Habgood, Grant, Bekariaris, Constantinou, Macek & Polyzoidis, 1989; Lindsay et al, 1997)

4. ATTITUDES

Research into young people's attitudes to HIV and AIDS has centred on two main areas: discriminatory attitudes to people living with HIV, and attitudes to condoms and their use.

Young people's attitudes to HIV/AIDS and in particular, AIDS stigma, is significant for two reasons. First, it is important to know how much discrimination young people will direct at those living with HIV or deemed 'at risk'. Attaching a stigma to HIV affects both the stigmatiser and the victim. It is unpleasant for the victim of the discrimination, but it could also lead young people to avoid accessing information about HIV and using preventive measures because they feel it would identify them with the stigmatised group. Secondly, it has been argued that discriminatory attitudes are a way of distancing oneself from those with HIV and from the epidemic itself. This reduces people's motivation to take precautionary action (Edgar, Freimuth & Hammond, 1988; Fennell, 1990; Goldin, 1994). That is, the more that HIV is stigmatised, the less likely people will be to see themselves as at risk, and thus the less likely they will feel the need to protect themselves from infection on the basis of personal vulnerability.

It has been argued that it is important to know young people's attitudes to condoms because attitudes have been conceptualised as a direct 'determinant' of condom use. That is, some researchers/studies have maintained that attitudes to condoms act as statistical 'predictors' of future or past condom use in rational models of sexual practice (Terry, Gallois & McCamish, 1993). However, this predictive relationship will be critically examined here.

4.1Discrimination against people living with HIV/AIDS (PLWHA)

Table 7 below lists the 16 statements designed to measure attitudes towards PLWHA. The questions covered rights and responsibilities of

those infected, blame and treatment. A scale was created by taking the mean of the answers given[4]

Table 7: Proportions answering questions on discrimination against PLWHA, using four factors extracted from the HIV discrimination scale

Factor	Question	Strongly disagree	Disagree	50-50	Agree	Strongly agree
D-1	HIV and AIDS are a direct consequence of unnatural acts.	29.3	24.8	30.7	8.1	7.1
D-1	When you think about HIV and AIDS, you can understand why 'gays' get bashed	25.6	14.4	23.6	17.3	19.2
D-1	Most people with HIV have got it through their own fault.	16.9	19.4	36.4	15.1	12.0
D-1	My feeling about someone who is infected with HIV would depend on how they got the virus	21.7	15.6	25.1	18.6	19.1
D-1	Gay (homosexual) health professionals should provide all the treatment for AIDS patients	20.4	22.1	29.0	14.6	13.9

Table 7: Proportions answering questions on discrimination against PLWHA, using four factors extracted from the HIV discrimination scale (continued)

Factor	Question	Strongly disagree	Disagree	50-50	Agree	Strongly agree
D-2	If my child's school teacher is a homosexual, I should have the right to know.	25.1	20.3	18.1	14.4	22.0
D-2	Life insurance companies would be within their rights in refusing to insure homosexuals on the grounds that they might die from an AIDS-related illness	26.8	19.1	27.8	12.5	13.7
D-2	If someone is infected with HIV, their employer would be justified in sacking them.	44.4	24.6	20.8	6.3	3.9
D-2	Children with HIV have a right to continue attending their schools.	41.7	27.9	20.4	5.3	4.6
D-2	People with HIV should be isolated from the rest of the community.	51.8	25.4	13.1	4.3	5.4

[4] The mean for the discrimination scale calculated on only those respondents with non-missing data for all 16 questions was similar to that obtained for those respondents who had non-missing data on a minimum of 12 answers (.439, and .429 respectively).

D-2	Doctors, nurses, dentists and other health care workers should have the right to refuse to treat people with HIV.	17.4	16.7	33.3	16.1	16.5
D-3	AIDS patients should be given the same medical care as anyone else who is seriously ill.	5.7	5.9	16.0	44.5	27.9
D-3	People with HIV have the same rights to housing, employment and health care as anybody else.	6.7	7.9	16.7	42.8	25.9
D-3	If someone I know gets HIV, I ought not to care how they got it, I ought to care how I can help them.	5.3	3.9	21.4	42.4	26.8
D-4	People with HIV have the right to a full and satisfying sex life.	17.2	23.6	33.1	13.4	12.8
D-4	There should be a law to deal with people who infect their partners and maybe their babies with HIV.	6.5	9.4	30.1	21.6	32.3

Looking at Table 7, on average, these young people tend to be more tolerant than not when it comes to discriminatory attitudes towards PLWHA, but it does appear that the degree of tolerance changes with context. For example, only 9.2% agree that if someone is infected with HIV, their employer would be justified in sacking them; whereas, 26.2% agree that life insurance companies have the right to refuse to insure homosexuals on the grounds that they might die from an AIDS-related illness. Further detail on the different constituents of discriminatory responses towards PLWHA may be found in the description of the subscalesbelow.

4.1.1 Discrimination factors

Given that four of the questions loading onto Factor 1 specifically mention homosexuals or ‘gay’, and the remaining three make reference to the degree of deservedness for infection based on mode of transmission, I interpreted this factor as referring to the relationship between homophobia and HIV. It was not seen as a measure of homophobia per se, but rather a corollary of the interplay between HIV and homophobia. This factor will be subsequently referred to as ‘Homophobia and HIV’ (Factor D-1). Higher scores on this factor indicated more discriminatory attitudes. For Factor 2, the four questions which loaded most heavily onto this factor all made reference to treatment of PLWHA, particularly the granting or withholding of basic rights (to employment, to freedom). This factor will subsequently be referred to as ‘Rights of PLWHA’ (Factor D-2) and a higher score on this factor indicates greater endorsement of

the withholding of the rights of PLWHA. The three questions which loaded most heavily on this factor also referred to the rights of those infected, but there is a greater emphasis on care in these questions, that is, the provision of housing, treatment, and just 'help'. Therefore, this factor was interpreted as measuring compassion for PLWHA (Factor D-3), and higher scores on this factor indicate less compassion. Only two questions loaded onto Factor D-4: one refers to the right to a sex life for PLWHA and the other refers to legal sanctions for those people who infect their partner or child with HIV. Both of these questions contain the suggestion that the responsibility for protecting others from infection lies with those already infected. Transmission prevention by PLWHA may be achieved either through legal deterrents or by abstaining from sexual activity. Thus this factor will subsequently be referred to as 'Responsibility of PLWHA'. A higher score on this factor indicates endorsement of responsibility of PLWHA in preventing the infection of other people.

Table 8: Proportion correct on discrimination subscales D-1 to D-4, and total discrimination score (minimum -2, maximum 2) for male and female apprentices from capital city and non-capital city colleges

Scale	Men	Women	Capital city	Non-capital city
D-1	.20	-.33	.02	-.05
D-2	.12	-.19	-.01	.01
D-3	.10	-.17	.01	-.03
D-4	.08	-.13	-.04	.09
Total	-.24	-.69	-.41	-.43

Table 9: Proportion correct on discrimination subscales D-1 to D-4, and total knowledge score (minimum -2, maximum 2) across all states and territories of Australia

Scale	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
D-1	-.07	.11	-.08	-.33	.06	-.11	.03	-.09
D-2	-.04	-.01	.12	-.08	-.04	-.12	.04	.03
D-3	.13	.03	-.15	-.20	.01	-.12	-.03	.11
D-4	.06	-.02	-.16	-.02	-.07	.16	.02	.04
Total	-.44	-.36	-.48	-.62	-.42	-.49	-.41	-.43

Tables 8 and 9 show some trends in terms of differences in attitudes towards PLWHAs over sex, region and state. Table 8 clearly shows the male apprentices responded in a more discriminatory fashion than the females over all the factors, but particularly for the factor which dealt with HIV and homophobia. This is consistent with much of the research conducted on HIV/AIDS stigma (Grunseit, Lupton, Crawford, Kippax & Noble 1995; Leiker, Taub & Gast, 1995; Rosenthal, Smith, Reichler & Moore, 1996; Walkey, Taylor & Green, 1990; Noble, Kippax & Crawford, 1995.) However, there does not appear to be any consistent pattern across the different measures for region or state of residence.

4.1.2 Multiple variable analysis of total discrimination score

Table 10 below shows the results of a multiple variable analysis of the total discrimination score.

Table 10: Results of full multiple regression of total discrimination and HIV scores for all apprentices aged 24 years or younger

Independent variable (reference category)	B	t*	P-value
Sex (male respondents)	-.46	-20.14	<.001
Education (less than year 10)		F=11.86	<.001
Year 10	.03	0.72	1.00
Year 11	.01	0.14	1.00
Year 12	-.08	-1.79	.239

Independent variable (reference category)	B	t*	P-value
Religion (has a religion)		F=.35	.704
Don’t wish to say	-.01	-0.18	1.00
No religion	-.02	-0.79	.871

Table 10: Results of full multiple regression of total discrimination and HIV scores for all apprentices aged 24 years or younger (continued)

Independent variable (reference category)	B	t*	P-value
Church attendance (never)		F=2.97	.014
Less than once/year	.02	0.48	1.00
Once 6 months	-.04	-0.79	1.00
Once 3 months	-.06	-1.06	1.00
Monthly- Fortnightly	.11	2.98	.024
Weekly	.03	0.67	1.00
No religion	-.02	-0.79	1.00
Living arrangements (with parents)		F=3.96	.006
Alone	-.12	-1.96	.216
With partner	-.04	-1.13	1.00
With friends	-.11	-3.49	.004
Combination household	-.13	-2.22	.121
Place of birth (Australia)	-.16	-4.83	<.001
Language spoken at home (English)	.08	2.11	.039
Gay/bisexual sexual identity (heterosexual)	-.37	-4.84	<.001
Had intercourse (not had intercourse)	<.01	0.05	.959
Total HIV knowledge score	-.06	-12.3	<.001

Notes: Model significance, $F_{20,44}$=47.90, p <.001, R^2=20.9%. t*-t is derived from original coefficient of the category versus the reference category and its standard error

The trend for sex of respondents observed in the descriptive statistics was borne out in the multiple variable analysis: Male apprentices demonstrated more discriminatory responses, on average, than female respondents (P< 001, Table 12). Other variables also posting significant results in the multiple variable model were respondents' school education (P=.001), birthplace (P<.001), living arrangements (P=.006), sexual identity (P<.001), and total HIV knowledge score (P<.001). In detail, less discriminatory attitudes were associated with increasing level of education completed beyond Year 10, living with friends rather than with parents, being born outside Australia, nominating a gay or bisexual sexual identity (compared with heterosexual identity), and more accurate HIV knowledge.

4.2Attitudes to condoms

One branch of research which has attempted to account for the uneven adoption of condom use among young people is that which has measured

attitudes towards condoms. This research explains safe sex behaviour through modelling the relative contribution of the beliefs and attitudes held (or, at least, reported) by the individual, to intentions to use, and use of, condoms. Underpinning these models is the assumption that behaviour is intentional, and intentions are informed by rational cognitive processes. These processes are believed to be a function of beliefs about the outcomes of certain behaviours (such as condom use will prevent pregnancy), the importance of those outcomes to the person, self-efficacy, and a subjective assessment of the prevailing norms about this behaviour (e.g., what my friends think of condoms) (Terry, Gallois & McCamish, 1993). These assumptions have been challenged by other researchers (Ingham, Woodcock & Stenner, 1992; Kippax & Crawford, 1993; Moatti, Beltzer & Dab, 1996), who question linear and non-contextualised analysis of such complex behaviours.

Six items in Section E of the questionnaire (Appendix 3) were designed to measure attitudes to condoms in this project. The questions asked about ease of use, effect on personal and partner's pleasure and spontaneity, carrying condoms and self-efficacy in convincing a partner to use condoms when the partner did not want to. A scale was created by taking the mean of the answers[5] given

Table 11: Proportions answering questions regarding attitudes to condoms also indicating questions which constituted two factors extracted from the attitudes to condoms scale

Factor	Question	Strongly disagree	Disagree	50-50	Agree	Strongly agree
C-1	Condoms reduce sexual pleasure for me.	20.9	32.7	28.4	7.6	10.5
C-1	Condoms reduce sexual pleasure for my partner.	17.4	26.5	22.8	7.1	26.3
C-1	Condoms take away spontaneity in sex.	19.3	35.2	25.3	6.3	13.9
C-2	I would find it easy to convince a partner to use condoms when they didn't want to.	5.2	14.3	46.3	16.0	18.2
C-2	I find condoms very easy to use.	4.7	15.5	58.5	15.6	5.7
C-2	I don't like to carry condoms with me.	6.6	24.7	39.7	2.3	5.7

[5] The mean for the attitudes towards condom scale calculated for only those respondents with non-missing data for all six questions was similar to that obtained for those respondents who had non-missing data on a minimum of four answers (mean=.130, and .128 respectively).

Table 11 shows the six questions designed to measure the apprentices' attitudes to condoms. It would appear from the proportions given in this table that while the majority of the apprentices agree that they find condoms easy to use, a fair proportion (39.7%) do not like to carry them with them. Approximately equal proportions agree as disagree as to whether their own sexual pleasure is reduced by condoms, but many of the apprentices were unsure about the effect on their partner's pleasure (26.3%).

4.2.1 Attitudes to condoms factors

The first factor included three items with loadings exceeding.3 that related to how the person felt condoms affected sex, in particular pleasure and spontaneity. This factor was termed 'Pleasure and Spontaneity' (Factor C-1). The questions constituting the second factor were oriented towards respondents attitudes about the practical aspects of using condoms—that is, having to carry them, ease of use and negotiating with a partner to use them. Thus this factor was named 'Attitudes Towards Practical Aspects of Condoms' (Factor C-2). For both factors, higher scores indicate more positive attitudes towards condoms. Tables 12 and 13 below shows the apprentices' scores on these two subscales as well as a total score for all six questions, over sex, region and state.

Table 12: Scores on condom attitudes subscales C-1 and C-2, and overall condom attitudes score (minimum -2, maximum 2) for male and female apprentices from capital city and non-capital city colleges

Scale	Men	Women	Capital city	Non-capital city
C-1	-.02	.05	.01	.02
C-2	-.04	.09	-.01	.06
Total	.09	.19	.11	.16

Table 13 Scores on condom attitudes subscales C-1 and C-2, and total condom attitudes score (minimum -2, maximum 2) across all states and territories of Australia

Scale	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
C-1	-.03	-.01	.38	-.04	.04	.18	-.01	.03
C-2	.01	-.01	.07	.19	.05	-.07	01	-.06
Total	.09	.10	.34	.20	.14	.19	.12	.09

The male apprentices, on average, were not as positive about condoms as the female apprentices, both overall and in terms of pleasure and practical considerations (see Table 12). This is in keeping with previous research (Chapman & Hodgson, 1988). According to Table 13, apprentices from NSW generally had more negative attitudes to condoms, and those from the Northern Territory generally had more positive attitudes. However, an auxiliary univariate regression analysis indicated that there was no statistically significant differences between the states (P=.021).

4.2.2 Multiple variable analysis of total attitudes to condoms

Table 14 below details the results of a multiple regression of sex, living arrangements, and condom use with regular partners in the last year on total attitudes to condoms. As with the other multiple regression analyses in this report, only those variables found to be significantly associated with condom use in univariate analysis at the level of .01 were included on the full model.

Table 14: Results of full multiple regression of total attitudes to condoms scores for all apprentices aged 24 years or younger

Independent variable (reference category	B	t*	P-value
Sex (male respondents)	.13	3.61	.001
Living arrangements (with parents)		F=.91	.464
Alone	.09	0.96	1.00
With partners	-.09	-1.69	.386
With friends	.02	0.38	1.00
Combination households	.11	1.55	.506
Condom use with regular partners (never)		F=169.65	<.001
Inconsistent use	.19	6.03	<.001
Always use	.65	18.43	<.001

Notes: Model significance $_{8,58}$F=71.19, P<.001, ^{2}=R11.3%. t*—-t is derived from original coefficient of the category versus the reference category and its standard error

As suggested by the descriptive statistics described earlier, in a multiple variable analysis, female apprentices held more positive attitudes towards condoms than their male counterparts. The strongest

result, however, was for condom use in the past 12 months with regular partners. Apprentices always using condoms had a .65 higher score (in a range of -2 to 2) than those never using condoms with regular partners. This would appear at first glance to be unremarkable except that use with casual partners did not hold such importance: condom use with casual partners was not significantly associated with attitudes towards condoms once use with regular partners was included in the model.[6] These results support the findings of other quantitative research (Hillier, Hickey, Plummer & Haste, 1996; Rodden, Crawford, Kippax & French, 1996; Waddell, 1992).

Rather than explaining this result in terms of a direct rational and causal relationship between use and attitudes, in answer to some of the criticisms levelled at rational decision-making models, I will highlight the importance of social context in interpreting such a finding. Qualitative research has indicated that condom use in regular relationships is a much more meaningful act than in casual relationships (Abbott, 1987; Crawford, Turtle & Kippax, 1990; Rosenthal, Moore & Brumen, 1990; Kippax, Crawford & Waldby, 1994; Van de Ven, Turtle, Kippax, Crawford & French, 1996). Interpreting these findings through a socially located framework rather than a rational/predictive model, it could be argued that attitudes towards condoms do not act independently of the social context to which they refer. Rather, they interact with the performative boundaries of sexual relationships, and therefore vary with the relationship being enacted. That is, an attitude is not a fixed mental position that unidirectionally and uniformly determines behaviour in any context (or vice versa). If an attitude were fixed and determining (condoms reduce pleasure therefore I do not use them), it would not change its relationship with practice from context to context because the substantive practice has not changed (i.e., sexual intercourse). As it happens, their use (or non-use) in regular relationships carries more discursive weight than their use in a casual encounter. Thus one way of interpreting these results is that for young men and women, the relationship between condom use and attitudes to condoms is not a linear one, neither one wholly determining the other. Rather, they

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[6] In two analyses of condom use with regular partners and casual partners in the past 12 months of male apprentices using the same database in Grunseit (1998), the model for use with regular partners which included the two attitudes to condoms factors had an R^2 of 16.5%. Yet the model for use with casual partners had an R^2 only 4.6% even though the regression included exactly the same independent variables.

are bothpracticesthat cluster together within the performativity of heterosexual relations. Attitudes towards condoms may be seen as another site, or another practice, along withtheir use, by which sexual relationships are read and defined.

5. SEXUAL BEHAVIOUR

Over 80% of those aged 24 years or younger (and 84.5% of those aged 17 to 20 years, not shown in table) had experienced either vaginal or anal sex. Sexual debut for this sample was around the age of 16 years. The majority of respondents had also given and/or received oral sex, but only a minority had had sexual contact with the same sex as themselves. Interestingly, although the proportions of male and female apprentices experiencing vaginal and/or anal intercourse, and receiving oral sex were approximately equal, between 9% and 13% more female than male apprentices had given oral sex ever.

5.1 First intercourse

Table 15: Proportion for sexual experience and first intercourse for male and female apprentices from capital city and non-capital city colleges

Variable	Men	Women	Capital city	Non-capital city
Vaginal or anal sex ever	82.2	84.3	81.7	86.5
Age at first intercourse (years)	15.8	15.9	15.8	15.9
Partner's age (years)	16.8	18.3	17.3	17.5
Age difference (years)	-.91	-2.45	-1.52	-1.57
Used any contraception*	81.5	86.0	83.7	82.3
Used condom at first intercourse*	68.6	70.7	69.7	68.7
Steady partner at first intercourse*	34.2	58.7	42.4	44.1

Note: *As a proportion of those who have had intercourse

Table 16: Proportion for sexual experience and first intercourse across all states and territories of Australia

Variable	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Vaginal or anal sex ever	89.2	81.2	85.2	92.6	76.8	86.8	84.9	79.5
Age first sex (years)	16.0	15.8	15.5	15.9	15.7	15.7	16.1	15.6
Used any contraception*	82.3	83.1	66.9	80.7	88.1	88.4	83.1	84.6
Used condom*	70.3	68.5	50.7	66.5	71.9	75.2	70.8	71.3

Note: *As a proportion of those who have had intercourse

Table 15 indicates that the male and female apprentices were of comparable ages at sexual debut, and were proportionally as experienced as each other in terms of anal or vaginal intercourse. However, it is also clear from this table that the female apprentices were younger than their partner at first intercourse, and were more likely to say their first partner was a steady partner than the male apprentices. All these findings are in keeping with previous research (Dunne, Donald, Lucke, Nilsson, et al., 1993; Kovacs, Dun, & Selwood, 1986; Lindsay et al., 1997; Træen, Lewin & Sundet, 1992), although this group appear to be proportionally more sexually experienced than university students aged 17-20 years: (62%, Moore & Rosenthal, 1991; 58%, Rodden et al., 1996; 63%, Rosenthal, Hall & Moore, 1992; 61.2%, Turtle et al, 1989). Condom use for male and female apprentices was similar despite the large difference in partner type. The apparent differences between the states on vaginal/anal sexual experience were statistically significant ($P<.0001$), and remained significant for Queensland and Australian Capital Territory (versus New South Wales)

even after adjusting for sample age differences between the states (P<.001).

At first intercourse, 35.1% said that sex was on the 'spur of the moment', and 34.9% said that they knew intercourse would happen soon but were not sure exactly when. A further 16 percent said that they and their partner planned the first occasion of intercourse and 1.1% (all female) said that they were either raped or coerced into their first occasion sexual intercourse. Condom use varied with the circumstances under which the first occasion of intercourse took place (see Table 17).

Table 17: Condom use at first intercourse by circumstances of first intercourse

How first occasion happened	% using condoms
Spur of the moment	62.5
Knew it would be soon but was not sure when	72.7
I expected it to happen at that time	69.1
I planned it to happen at that time	69.6
We planned it to happen at that time	82.4
I was/we were drunk	45.9
The other person planned it	78.4
Rape/coercion	28.0

5.1.1 Multiple Variable Analysis of Condom Use at First Intercourse

Table 18: Results of full logistic regression of condom use at first intercourse (versus non-use) for all apprentices aged 24 years or younger

Independent variable (reference category)	OR	t*	P-value
Sex (male respondents)	1.03	0.31	.755
Education (less than year 10)		F=2.69	.054
Year 10	1.08	0.33	1.00
Year 11	1.59	1.83	.213
Year 12	1.37	1.24	.657
Living arrangements (with parents)		F=3.14	.021
Alone	.79	-0.99	1.00
With partner	.85	-1.13	1.00
With friends	.88	-1.40	.660

Combination household	.56	-2.10	.158
Had HIV education at school (no HIV education)	1.06	0.71	.479

Table 18: Results of full logistic regression of condom use at first intercourse (versus non-use) for all apprentices aged 24 years or younger (cont'd)

Independent variable (reference category)	OR	t*	P-value
Status of partner (not steady)	1.07	1.40	.165
How first intercourse occurred (I/we planned it)		F=8.35	<.001
Spur of the moment	.45	-3.69	<.001
Knew it would happens soon but wasn't sure when	.59	-2.79	.006
I expected it to happen then	.54	-3.29	.005
Respondent had no control over first intercourse	.18	-5.19	<.001
Age of first intercourse	1.28	7.77	<.001
Age	.84	-4.15	<.001
Years since left school	.96	0.74	.460

Notes: Model significance, F=14.79, P< 001, R^2 8.5%. t*—t is derived from original coefficient of the category versus the reference category and its standard error

Table 18 details a multiple regression analysis of condom use at first intercourse. Consistent with previous research, the older apprentices were at the time of their coital initiation, the greater the likelihood of a condom being used (P<001) (Faulkenberry, Vincent, James & Johnson, 1987; Johnson, Wadsworth, Wellings & Field, 1994; Kraft, Rise & Træen, 1990), although there is often a levelling off or decline in use at around age 18/19 years. This trend in the present survey is shown graphically in Figure 1 below.

Figure 1: Condom use at first intercourse by age of first intercourse for all apprentices aged 24 years or younger who have had intercourse

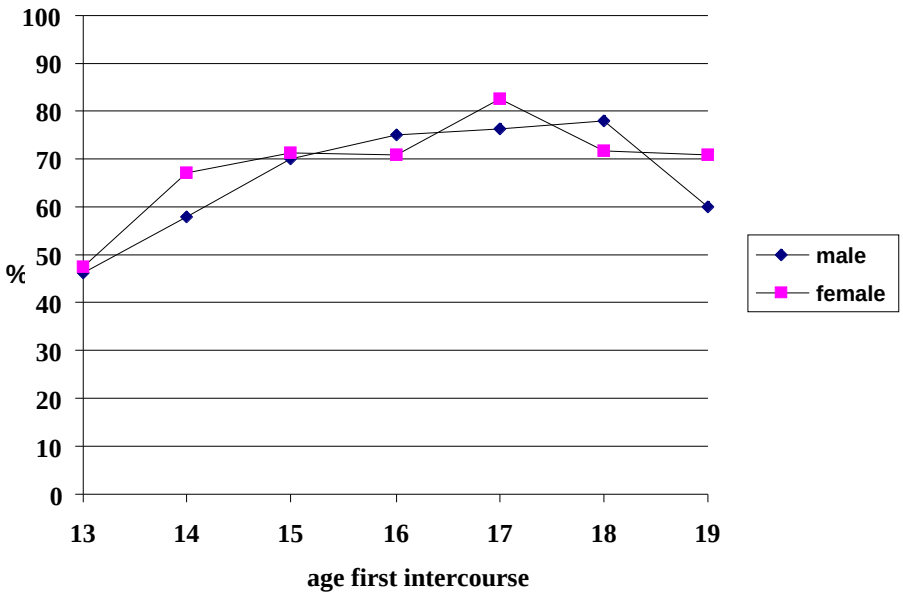


Table 18 also indicates that the older the apprentice at the time of the survey, the less likely they were to have used a condom at first intercourse (P<.001), perhaps reflecting the generational effects demonstrated in overseas research (Johnson, et al., 1994; Toulemon & Leridon, 1998; also see Figures 2 and 3 below). Compared with either planning the first occasion of intercourse with a partner or the respondent planning it themselves, those apprentices who did not plan had up to one-fifth the odds of using a condom. This includes those apprentices who expected their first coital experience to happen when it did, but did not plan it as such (P=.005, Table 18). The least likely group to use a condom was, not unexpectedly, those who had no control in the situation (i.e., were drunk, coerced or raped). Finally and quite interestingly, status of sexual partner (steady versus non-steady) and sex were among the remaining covariates which were not significant in the multiple variable model (P=.165).

The following two figures give graphic representation of the change in condom use at first intercourse that has occurred over the AIDS era to the time of the survey in 1995.

Figure 2: Condom use at first intercourse by year of birth for all apprentices aged 24 years or younger who have had intercourse

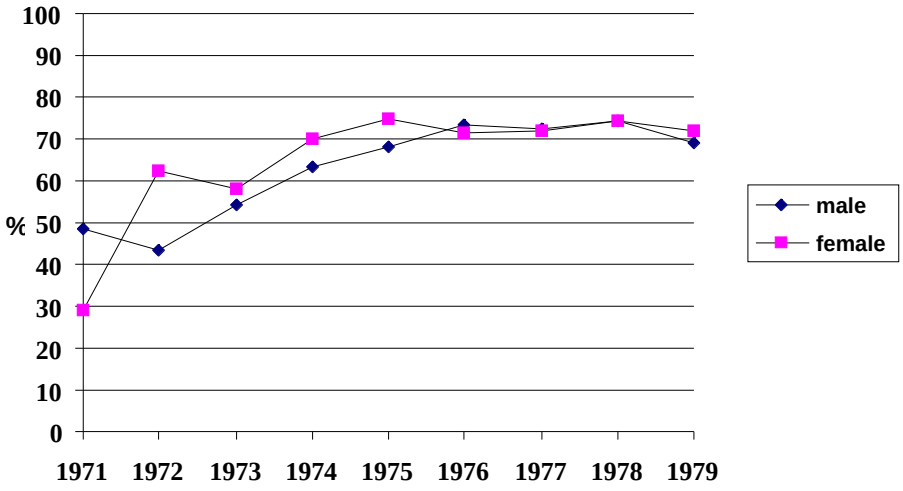
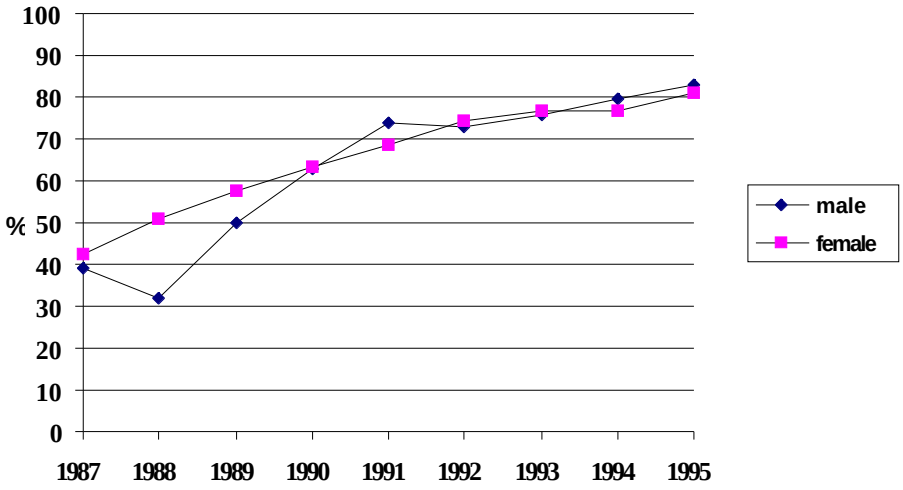


Figure 3: Condom use at first intercourse by year of first intercourse for all apprentices aged 24 years or younger who have had intercourse



Both these figures show a clear trend towards greater use of condoms at first intercourse over the past decade. Although there has been a trend towards greater use of any type of contraception at first intercourse over the past couple of decades (Johnson et al., 1994; Kraft et al., 1990), there is also evidence to suggest the recent increasing popularity of condoms is attributable to the advent of HIV/AIDS (Mauldon, & Luker, 1996; Piccinino & Mosher, 1998).

5.2 Sexual behaviour in the past 12 months

Table 19: Sexual behaviour in last 12 months and sexual identity for male and female apprentices from capital city and non-capital city colleges

Variable	Men	Women	Capital city	Non-capital city
Regular partners in last year*	1 (0-60)	1 (0-18)	1 (0-48)	1 (0-60)
Casual partners in last year*	1 (0-98)	0 (0-20)	1 (0-75)	1 (0-98)
Condom use at last intercourse†	59.1	42.4	52.9	51.2
Steady partner at last intercourse†	53.9	76.3	63.3	62.9
Heterosexual identity	93.9	94.5	93.8	95.0
Homosexual or bisexual identity	3.3	2.3	2.9	3.0
Same sex contact ever	6.4	9.5	7.8	7.1
Same sex contact in last year	3.7	4.3	4.0	3.6

Notes: *Median number of partners of those who have had intercourse ever (range, maximum 98+).
† Of those who had intercourse in the past 12 months

Table 20: Condom use at last intercourse across all states and territories of Australia

Factor	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Used condom*	48.1	53.6	50.0	53.7	49.3	46.6	52.8	51.3

Notes: * Of those who have had intercourse in last 12 months

There is little difference between the male and female apprentices in homosexual activity in the last 12 months or sexual identity (see Table 19). Female apprentices were likely to have had fewer casual sexual partners in the past year, or to have used a condom at last intercourse, however. The proportion of apprentices reporting that their last sexual encounter was with a steady partner had increased by around 20% on that for first intercourse, however, the difference between male and females remained approximately the same as it was at coital initiation (approximately 20%). Condom use at last intercourse over the eight states and territories of Australia showed an average rate of around 50%, with little variation between them.

5.2.1 Multiple variable analysis of condom use at last intercourse

The results of a multiple variable analysis of condom use at last intercourse is shown in Table 21.

Table 21: Results of full logistic regression of condom use at last intercourse (versus no condom used) for all apprentices aged 24 years or younger

Independent variable (reference category)	OR	t*	P-value
Sex (male respondents)	.53	-5.95	<.001
Importance of religion (not important)		F=3.70	.009
A little important	.79	-1.79	.311
Quite important	1.14	0.65	1.00
Very important	1.46	1.96	.217
No religion	.99	-0.30	1.00
Living arrangements (with parents)		F=10.77	<.001
Alone	.97	-0.06	1.00
With partner	.38	-5.15	<.001
With friends	1.18	0.09	1.00
Combination household	.44	-3.19	.009
Language spoken at home (English)	1.81	2.81	.007
Status of last partner (not steady)	.35	-7.97	<.001
Used condom first intercourse (no condom)	3.11	9.10	<.001
Years since first intercourse	.92	-2.87	.006
Age	.95	-1.09	.279
Years since left school	.95	-1.38	.173

Notes: Model significance, $F_{15,49} = 27.59$, $p < .001$, R^2 19.3%.

t*-t is derived from original coefficient of the category versus the reference category and its standard error

Female apprentices had just over half the odds of male apprentices of using a condom at last intercourse (P< .001) in keeping with other research (Fife-Shaw & Breakwell, 1992; Donald, Lucke, Dunne, O'Toole & Raphael, 1994; Hillier et al., 1996; Lindsay et al., 1997; Moreau-Gruet, Feron, Jeannin & Dubois-Arber, 1996; Rosenthal, Smith & de Visser, 1997; Schaalma, Kok & Peters, 1993; Svenson, Carmel & Varnhagen, 1997). This effect is over and above that which is

attributable to partner type, given that the female apprentices were more likely to have stated their last sexual partner was a steady one—(see Tables 19, and A4)—which is associated with less condom use. Apprentices from a non-English speaking background had 1.8 times the odds of those apprentices speaking English at home of using a condom at last intercourse (P=.007). Apprentices living with a sexual partner or in a combination household of family, friends and/or a sexual partner had just over one-third the odds of those living with their parents of having used a condom on their most recent occasion of intercourse (P< .001). In contrast with condom use at first intercourse, if the partner at last intercourse was a steady partner, the odds of a condom being used on that occasion were one-third of those if the partner was not steady (P<.001). Finally, the odds of condom use were more than tripled if a condom was used at first intercourse (P<.001), but, as found in other research, reduced by .91 with each year since first intercourse (P=.006) (Kraft et al., 1990; Dunne Donald, Lucke, Nilsson et al., 1994; Moreau-Gruet et al., 1996).

6. OTHER INDICATORS

Described here are a number of other variables are described pertinent to researchers and workers in the field of HIV—namely, injection practices, receipt of HIV education at school, and expectations of fidelity in a regular relationship. The proportions associated with these variables are displayed by sex and region in Table 22, and by state in Table 23[7].

Table 22: Injection practices, HIV education at school, and expectations of fidelity for male and female apprentices from capital city and non-capital city colleges

Variable	Men	Women	Capital city	Non-capital city
Injected drugs ever	8.0	6.9	8.0	6.4
Shared needles ever*	19.3	20.9	19.9	20.0

[7] It did not seem necessary to display expectations of fidelity by state as there is no theoretical basis to expect that any differences between the states would be socially meaningful.

Had HIV education at school	66.9	67.1	66.5	68.3
Wanted more HIV education	44.9	61.1	49.3	56.3
Expects self to be faithful	76.9	93.2	81.8	87.6
Expects partner to be faithful	90.4	96.3	91.5	96.0

Notes: *Of those who have injected drugs ever

Table 23: Injection practices, HIV education at school, and expectations of fidelity across all states and territories of Australia

Variable	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
Injected drugs ever	7.0	7.1	5.1	12.9	5.4	1.7	6.1	10.6
Shared needles ever*	11.1	24.1	20.0	16.7	5.6	20.0	16.2	25.6
Had HIV education at school	75.3	71.1	46.9	63.0	64.8	73.7	56.2	74.2
Wanted more HIV education	49.1	48.5	70.4	59.0	45.9	50.6	57.2	45.8

Notes: *Of those who have injected drugs[8] ever

Table 22 would seem to indicate that male and female apprentices had similar experience of injecting drugs and sharing needles, as did apprentices from capital city and non-capital city colleges. In terms of receipt of HIV education, again region and sex appeared to make little difference. However, in terms of HIV education, both female apprentices and those from non-capital city areas were keener to have more HIV education than male apprentices or those who attended capital-city colleges. Looking across the states and territories on these measures (Table 23), Queensland had the highest rate of experience of injecting drugs, and Tasmania the lowest, though the latter reported the highest rate of sharing needles. On cautionary note, the numbers involved in these statistics were very small and would benefit from being contextualised by data from other studies with a larger number of respondents.

Recall of receiving HIV education at school was highly variable across the states. Less than half of the respondents in the Northern Territory compared with three-quarters from the ACT reported that they had received HIV education at school. In an auxiliary analysis, the state differences persisted even after accounting for years since left school and level of school education. Therefore, despite these factors being equal, significantly fewer young people from Victoria (OR = .57, $p < .001$) and, marginally, Northern Territory (OR = .47, $p = .042$)[9] recall receiving HIV education at school compared with those

[8] Note that the number of apprentices reporting sharing needles ever was often small (range n=1 to n=26), therefore these statistics should be interpreted with caution.

[9] The non-significant test statistic for this comparison is likely to be due to the small number of respondents from the Northern Territory surveyed in this study.

from New South Wales. Tellingly, over 70% of apprentices from the Northern Territory expressed the desire for more HIV education, compared with around 50% for apprentices from other states.

From Table 22 some interesting statistics emerged on young men and women's expectation of their own and their partner's fidelity in regular relationships. A large proportion of both male (90.4%) and female (96.3%) apprentices expected their partners not to have any other sexual partners apart from themselves when in a regular relationship. However, only 76.9% of male apprentices expected the same level of fidelity of themselves: this compares with 93.2% of females expecting to remain faithful. These expectations were analysed by polychotomous logistic regression (Menard, 1995), and results are given in Table 24 below.

6.1 Multiple variable analysis of expectations of fidelity

Table 24: Results of full logistic regression of expectations of fidelity with a regular partner for all apprentices aged 24 years or younger

Independent variable (reference category)		OR	t*	P-value
Sex (male respondents)			F=95.51	<.001
	Only partner monogamous	.21	-10.98	<.001
	Both non-monogamous	.26	-6.53	<.001
Education (less than year 10)			F=5.63	<.001
Year 10	Only partner monogamous	1.78	1.49	.143
	Both non-monogamous	.66	-6.53	.260
Year 11	Only partner monogamous	2.31	2.52	.014
	Both non-monogamous	.97	-0.09	.929
Year 12	Only partner monogamous	2.26	2.56	.013
	Both non-monogamous	.49	-1.76	.083
Living arrangements (with parents)			F=8.62	<.001
Alone	Only partner monogamous	1.50	1.15	.251
	Both non-monogamous	2.69	1.69	.096
With partner	Only partner monogamous	.56	-1.47	.016
	Both non-monogamous	1.34	1.54	.130
With friends	Only partner monogamous	1.66	2.49	.015
	Both non-monogamous	2.49	6.62	<.001
Combination household	Only partner monogamous	.96	-0.10	.918
	Both non-monogamous	1.12	0.22	.823
Language spoken at home (English)			F=27.45	<.001
	Only partner monogamous	2.50	4.87	<.001
	Both non-monogamous	2.25	6.59	<.001
Region (capital city)			F=18.75	<.001

Independent variable (reference category)		OR	t*	P-value
	Only partner monogamous	.84	-1.19	.239
	Both non-monogamous	.39	-6.15	<.001
Had intercourse (not had intercourse)			F=51.64	<.001
	Only partner monogamous	7.98	9.67	<.001
	Both non-monogamous	2.03	3.08	.003
Age			F=5.52	.013
	Only partner monogamous	.86	-3.25	.002
	Both non-monogamous	.92	-1.70	.094

Notes: Model significance, $F_{5,12} = 44.64$, $p < .001$, R^2 4.2%

t* —t is derived from original coefficient of the category versus the reference category and its standard error

[1] Note that odds ratios for only partner monogamous than respondent and both non-monogamous than partner at first intercourse are calculated by comparison with partner and respondent same at first intercourse

Although the regression model only accounts for 4.2% of the deviance in expectation of fidelity, the pattern of results is worthy of comment. Coitally experienced apprentices (versus non-experienced) had greater odds both of expecting a double standard of monogamy allowing themselves others partners ($p < .001$), and tolerating an open relationship ($P=.003$) compared with remaining mutually monogamous. As foreshadowed in the descriptive statistics, the expectations of men and women differed markedly, and somewhat dangerously. Female apprentices are approximately one-fifth as likely to expect fidelity of their partner but not themselves (compared with expecting mutual monogamy) than male apprentices. Male apprentices were approximately five times more likely than female apprentices to expect fidelity from their partners but not themselves, compared with expecting mutual monogamy. What this means is that young men and young women differ in what they consider acceptable behaviour in a regular relationship. This is problematic, given that condom use is often contingent upon assumptions of commitment and monogamy (Ingham, Woodcock & Stenner, 1991; Stephenson, Kippax & Crawford, 1994; Waldby, Kippax & Crawford, 1993).

7. SUMMARY AND CONCLUSIONS

This national survey of TAFE apprentices adds important data to the growing fund of information on young peoples' sexual health. More socially diverse and sexually active than many other populations involved in Australian HIV research, this sample provides a valuable 'snapshot' of Australian youth that is both reassuring and disturbing.

The young people in this study are aware that HIV is transmitted sexually, irrespective of sexual identity, and transmitted via sharing needles irrespective of the type of drug being injected. Their knowledge improved with receiving HIV education, over and above their level of school education (which also was associated with better knowledge of HIV). Tolerance of those living with HIV/AIDS also improved with reporting that they had had HIV education at school.

The vast majority of the apprentices used condoms on their first occasion of intercourse (approximately 69%), and have done so increasingly so over the past decade. Approximately half of those apprentices who had intercourse in the 12 months preceding the survey used condoms at last intercourse. Although condom use at last intercourse is considerably lower than at first intercourse, the chances of use improve with use at first intercourse. The rate of injecting recreational drug use ever is below 10% in most states, and few apprentices reported ever sharing needles.

However, a number of areas do invite concern. Uncertainty about transmission of HIV via social contact still persists, and knowledge of the legal obligations of disclosure of HIV-antibody status to a sexual partner and/or an employer is poor. Further, young men express negative attitudes towards PLWHA and are particularly intolerant of male homosexuality within the context of HIV. Other researchers have commented of the dangerous nexus of heterosexual masculinity defined through homophobia, and the conflation of HIV risk and male homosexual activity (Bleich, 1989; Wilton & Aggleton, 1991).

A number of young men in this study also indicated that they expected that they may be unfaithful in a regular relationship while expecting monogamy from their partner. Yet, the vast majority of the young women expected both themselves and their partner to be monogamous. This is a somewhat hazardous mismatch of expectations in heterosexual relations, especially given the serial monogamy that

characterises young people's early sexual relationships (Moore & Rosenthal, 1991). Young women also seem to be less likely to use condoms with their sexual partners over and above the type of partner. These findings highlight the need to focus attention on the understandings of masculinity and femininity which structure young people's sexual behaviour in the light of the HIV epidemic (Kippax et al., 1994; Wyn & Stewart, 1991).

Finally, recall of receipt of HIV education at school indicated that in some states of Australia, large numbers of young people might not have been exposed to formal HIV education in the school setting. Although this is rather a crude measure of experience of HIV education, it is telling nonetheless, because if they did receive education, it clearly was not substantial enough for them to recall receiving it. This is of considerable concern given the prominent role the school may play as a source of informing young people about HIV and other STDs (Lindsay et al., 1997). Given this, and the accumulating evidence that suggest that HIV/sex education is most effective if given prior to commencement of sexual activity (Grunseit, Kippax, Aggleton, Baldo & Slutkin, 1997), a rigorous investigation of the implementation of education department directives on HIV education may be warranted. Because while it is mandatory for secondary school students to receive HIV education, how this education is constituted and delivered is largely left up to the discretion of the individual school. As such, there is considerable latitude for inadequate, as well as comprehensive, coverage.

As the data presented here suggest, the majority of young people are sexually active before leaving their teenage years, and therefore their sexual health needs to be taken seriously. Further, although they are keenly aware that HIV is sexually transmitted, there are many other mitigating circumstances that erode the uptake of safe sexual practice with any genuine sustaining power. Far from pathologising young people as an inherently 'risky' group (Aggleton, 1991), this means that strategies designed to improve young people's sexual health need to engage with the network of socially derived meanings around sexuality, gender and disease which inform their sexual practices. Further, this engagement needs to occur at a time when educators can harness young people's attention, in an environment which supports the establishment of cultural norms, and, critically, before young people embark on a sexual career.

APPENDICES

APPENDIX 1: SAMPLING METHOD

1 SAMPLING

1.1 Constructing the sampling frame

The sampling frame was based on the population of first year students in the three courses attending in the year prior to that of the data collection (1994). However, apprentices in both first and second year were surveyed. Third year apprentices were not included because hairdressing apprentices only attend college for two years. The apprentices in their first year of college will be referred to as stage 1 apprentices, and those will be referred to as stage 2[10]. This is in accordance with the terms used in TAFE.

The statistics and planning unit of each of the state authorities dealing with technical and further education was contacted, and enrolment numbers in each apprenticeship for 1994, broken down by state, year (incomplete), gender (incomplete), and college offering the course, were requested. As the handbooks also designated the colleges as either metropolitan or non-metropolitan/country, the enrolment numbers could be stratified by region. These statistics were used when calculating estimates of desired sample size, and to create a list of colleges from which the sample could be generated. Some state authorities could not supply the 1994 statistics in time for data collection arrangements to be made, therefore those for 1993 were used. It should be noted that only colleges with course

[10] The terms 'stage 1' and 'stage 2' only refer to the number of years for which the apprentices were enrolled in college (stage 1 meaning they had just started, and stage 2 meaning they had completed their first year and were commencing their second), rather than how many years they had spent indentured to an employer. This is because apprentices may be indentured to an employer for some time prior to commencing college. Further, with competency-based training, an apprentice may be studying stage 2 modules while still in their first year of college. Therefore, as the interest in this project was in the time spent in the cultural milieu, the terms stage 1 and stage 2 were used to indicate the duration of enrolment at college.

enrolments exceeding 10 were included in the sample calculations and selection lists, as surveying classes smaller than this would have incurred substantial increased running costs for little benefit.

There were a number of problems with using 1993/1994 statistics for sample selection for classes conducted in 1995 (the year of data collection). Sometimes a college that had offered the course previously no longer did so in 1995, and some that offered the course in 1995 had done so for the first time. The latter issue was more problematic than the former because there were no enrolment data available. For selection purposes these colleges were included in the list and assumed to be of medium size.[11]

1.2 Sampling procedure

The primary sampling unit (PSU) (Kalton, 1983) in this study was college offering the course. Two methods of sampling the PSUs or colleges were employed: The Australian Capital Territory, Northern Territory, South Australia and Tasmania often had one college per cell of the sampling frame (that is per apprenticeship per state per region). Thus random sampling of colleges was not appropriate. Therefore, all colleges (PSUs) in that state which offered hairdressing, automotive or cookery, and which had a first year enrolment that exceeded ten, were selected. This will be hereafter be referred to as the '100% sample'. In the other, more populous states, a sample of the total number of colleges offering the courses was taken. This will be referred to as the '25% sample' (see below for the determination of this sampling fraction). As separate sampling by year (i.e., first or second year of course) would have entailed visiting more colleges than the project budget would allow, students in both years of a selected college were surveyed. Finally, when the PSUs are groups of subjects (in this case, colleges) rather than individual subjects, the sampling procedure is referred to as 'cluster sampling' (Kalton, 1983).

1.3 Cluster sampling

In terms of cost, cluster sampling is often more efficient than a simple random sampling. For example, in the present case, taking a

[11] The colleges were arranged in order of size (small, medium, large) in the selection list. See 1.5: The Selection List.

simple random sample would have entailed visits to many colleges, often to survey only a few subjects, while sampling by cluster meant that more subjects were gathered from fewer colleges. However, there is a price to pay in terms of the precision of estimates based on the data. This arises if the subjects in the clusters are more like each other in terms of the measures of interest than a random sample of subjects from the same population, resulting in the observations not being independent of one another. The measure of the average similarity of subjects in clusters is the intraclass correlation, rho. The higher the intraclass correlation (and the larger the clusters), the less precise are the estimates obtained from the clustered sample as opposed to those based on a simple random sample (SRS). The design effect, deff, provides an index of the effect of clustering, by showing how much larger a cluster sample would have to be than a SRS in order to provide estimates of equal precision. For example, a deff of 1.5 for a cluster sample would indicate that, for a particular parameter, such as the mean, the cluster sample would have to be 1.5 times the size of an SRS to give an equal-sized confidence interval around the mean. Thus, an analysis of clustered data which ignores a lack of independence of the clustered observations will give rise to misleadingly small standard errors and confidence limits, and therefore an inflated Type I error.

Some of the precision lost by cluster sampling (but often, not much) can be regained by the use of stratification. While cluster sampling involves selecting only some of a number of relatively homogeneous subsets of subjects, stratification works by ensuring that subjects are sampled from all levels of one or more classification variables which might be expected to group subjects into homogeneous subsets in terms of the measures used. Thus, in this project, the clusters (colleges) were randomly selected within all the stratification levels (e.g., New South Wales, rural, cooks) to ensure their representation in the sample. Unlike some cluster designs, there was no random sampling of individuals from within the selected primary sampling units (colleges), although in some cases the entire population of a selected college was not captured for other reasons.

1.4 Calculating the sampling fraction

To determine the sampling fraction that would result in a sample giving the desired precision when adjusted for clustering, the

following calculations were made. The population sizes for hairdressing, cookery and automotive were 2320, 2145, and 3000, respectively. With appropriate adjustment it was estimated that samples of 577, 565, and 611 respectively were needed. By these computations, the average size of the estimated sample as a proportion of the total population for each apprenticeship was 23.8%. Therefore a sampling fraction of 1 in 4 for college selection was used.

1.5 The selection list

Eligible colleges (i.e., those which were offering the course in 1995 and had an enrolment of greater than 10 in the course of interest in 1993/1994) were stratified by apprenticeship, region and by state. List size for each apprenticeship in each state ranged from 4 to 36 with a median size of 9.5 colleges. The order of the list was: small colleges (fewer than 30 students;) medium (between 30 and 60 students) and large (greater than 60 students). Within these size ranges, colleges were put into alphabetical order. The number of metropolitan and non-metropolitan colleges, and the number of metropolitan and non-metropolitan students enrolled, were each summed separately and then divided by four. This gave the quota of colleges and the quota of students that represented a quarter (the sampling fraction) of the corresponding population of colleges and students. It was expected that a sample of one quarter of the colleges would yield a sample of one quarter of the students. The random number 10 was used as a starting point (and this college was selected) and then every fourth college was selected until one quarter of the colleges in a list were picked. Selection was without replacement as once a college was selected all the students were taken from it. Once one quarter of the colleges in a particular state were selected, the estimated number of students was calculated to see if it reached the quota of one quarter of all students for each region in that apprenticeship. If the quota was not reached, another college was selected by taking the fourth college after the last one selected within the appropriate region (i.e., metropolitan or non-metropolitan) until the quota of students was reached.

2. Results of sampling strategy

2.1 Relationship of observed to expected proportions and weighting

Enrolment figures were obtained for the entire population in three apprenticeship groups in 1995 so that appropriate weights could be applied to the sample data. Weights were applied to individual students so that proportion in each region by apprenticeship by state cell matched that in the population. Table 13.1 shows the expected proportion of students by stratum as a percentage of the total population of hairdressing automotive and commercial cookery apprentices in 1995, and the corresponding proportions obtained in the sample. The table also details the proportions expected and observed for each of the two sampling methods (i.e., 25% sample and 100% sample).

Table A: Population and sample proportions by region, apprenticeship, state and sampling method, and proportions for Australian population in 1995 (McLennan, 1996)

Strata	Population percentage	Sample percentage	Australian population
Capital city	73.8	71.0	63.8
Non-capital city	26.2	29.0	36.2
Cookery	32.4	27.4	-
Automotive	37.8	35.4	-
Hairdressing	29.8	37.2	-
Australian Capital Territory	3.3	7.6	1.68
New South Wales	40.3	40.9	33.9
Northern Territory	1.5	2.0	.96
Queensland	9.9	10.8	18.2
South Australia	7.5	8.2	8.2
Tasmania	2.7	4.8	2.6
Victoria	21.4	16.3	24.9
Western Australia	13.6	10.2	9.6
25% sample	85.1	77.4	86.5
100% sample	14.9	22.6	13.5

Note: Percentages may not add to 100% due to rounding.

Table A indicates that the sampling methods generally achieved a distribution of respondents similar to that of the population of students in 1995 over the three strata of region, apprenticeship and state. The oversampling in hairdressing may have occurred because 79% of the colleges offering this course used day release college attendance, compared with 56% for cookery and 37% for automotive. Full quota sampling was more likely in colleges that used the day

release rather than the block release system because in the former students were potentially present in the space of a week, while in the block system students were only present for a short interval (block) spread at some time over the whole term. Extensive use of the block release system within some states may also account for the less than expected number of students obtained by the 100% sampling strategy.

2.2 Response rate for population available on the days of data collection

The response rates given in Table A and discussed above reflect the degree of success in covering students in the entire population for the year. Another response rate is the number surveyed as a proportion of those who were potentially on site on the days that colleges were actually visited. This proportion was determined by noting for each the number of students in the class who were absent or refused to participate. The median response rate in a class of those students who could have attended on the days of data collection was 91% (minimum 11% of a class, maximum, 100% of a class). The estimate of the total number of potential students to be surveyed was 4995 (total collected surveys plus total refused plus total absent). This is likely to be an slight underestimate as 10 classes out of 381 did not have absentees noted. The absentee rate was 12.5% (n=651) of potential student total, and the refusal rate was 1.23% (n=61) of potential student total. The overall response rate varied significantly by researcher who collecting the data, state, and apprenticeship but not year (first or second) of class. However, the refusal rate did not vary significantly by researcher who collected the data, state, apprenticeship or stage of class. As the majority (91.4%) of missing surveys was due to absenteeism as opposed to refusals, the response rate as a function of those who should have been attending on the day of data collection was not practicably amenable to significant improvement. However, the response rate in terms of students who attended college on the days of data collection was very high (98.6%), and rates of refusal appear to be randomly distributed over apprenticeship, stage, state and researcher.

2.3 The effect of clustering on error estimates

To illustrate the effect of clustering, the table below details the standard errors for the means of a number of key variables when the

effect of clustering is ignored and when its is taken into account in an appropriate analysis. Both samples were weighted as described previously.

Table B: Standard error (SE) taking into account clustering and not taking into account clustering (primary sampling unit=campus) for six major variables

Variable	SE without accounting for clustering or stratification	SE accounting for clustering and stratification	design effect deff
Age (years)	.052	.101	5.28
Attitude to condoms	.012	.014	1.81
AIDS Discrimination Scale	.010	.026	8.14
Age first intercourse	.031	.045	2.67
HIV/AIDS Knowledge Scale	.043	.092	5.90
Sex Education Received Scale	.054	.081	2.92

The first line of Table B shows that in order to gain the same precision in measuring the mean age of the sample, a cluster sample would have to be 5.28 times the size of an SRS. Note that the design effect varies over the different measures. This reflects the differences in the homogeneity of the clusters (colleges) in terms of different items.

3 Introduction to the dataset

After unsatisfactory questionnaires were excluded (e.g., those with too many missing data or which were answered by pre-apprentices[12] rather than apprentices), data were available from 4252 apprentices. Of these, 27.4% (n=1164) were chefs, 35.4% were mechanics (n=1507), and 37.2% (1581) were hairdressers. 61.6% were male (n=2414) and 38.4% (n=1833) were female (five did not indicate their sex). This section gives a summary of the integrity of the data from the 4252 surveys, and an overview of the demographic characteristics of the sample.

3.1 Data integrity

Non-response rates on individual questions and scales were reasonably low (1% to 11.2%), with most questions yielding fewer than 5%

[12] Pre-apprentices were those students who attended college full-time and ostensibly did the same course as the apprentices but were not indentured to an employer

missing. The personal nature of some of the questions posed the risk of high rates of missing data in the sections on sexual behaviour, but in fact only 3.7% of the sample missed this section entirely[13] There were no differences in terms of sex, apprenticeship, researcher who collected the data, state of residence, or sexual identity between those who answered at least some of this section or those who omitted it entirely. Moreover, a difference between the sex of the researcher and the sex of the respondent did not increase (or decrease) non-response. Those apprentices from capital city colleges, those who did not speak English at home and those were born outside Australia were more likely to miss the entire sexual behaviour section of the questionnaire.

4 Knowledge

4.1 Knowledge Factors

The questions listed in Table 2 constituting the Total Knowledge Scale were submitted to a factor analysis by principal components extraction (Tabachnick & Fidell, 1998). For all factor analyses described in this report, factors were considered significant if they had an eigen value which exceeded 1. Variables which had a loading of greater than .3 on any one particular factor were used to interpret the meaning of the factor (Merenda, 1997). The factor scores for the knowledge subscales were calculated as the percentage correct out of the questions that loaded most heavily onto this factor. For example, Factor K-4 had three questions with loadings of greater than .3. These questions related to the protective ability of the contraceptive pill and appropriate condom use. Therefore, a score on this factor was the percentage correct out of these three questions. This way of representing the outcome variables was chosen to facilitate a clearer picture of performance across and within each of the factors, because the measure directly reflects the raw data.

[13] This was not due to lack of sexual experience, as the minimum number of questions to be answered in this section was four, even if the apprentice was not sexually experienced.

APPENDIX 2: SUPPLEMENTARY TABLES

Table A1: Data for Figure 1 of condom use at first intercourse by age of first intercourse for all apprentices aged 24 years or younger

Age first intercourse	% Male using condoms	% Female using condoms
13 (years)	46.4	47.6
14	59.9	67.0
15	69.8	71.2
16	75.1	70.8
17	76.1	82.4
18	77.9	71.5
19	60.2	70.8

Table A2: Data for Figure 2 of condom use at first intercourse by year of birth for all apprentices aged 24 years or younger

Year of birth	% Male using condoms	%Female using condoms
1971	48.4	29.2
1972	43.2	62.4
1973	54.1	58.0
1974	63.4	70.2
1975	68.1	74.9
1976	73.1	71.5
1977	72.2	71.8
1978	74.4	74.3
1979	69.2	71.8

Table A3: Data for Figure 3 of condom use at first intercourse by year of birth for all apprentices aged 24 years or younger

Year of first intercourse	% Male using condoms	% Female using condoms
1987	38.9	42.2
1988	31.9	51.0
1989	50.0	57.8
1990	62.9	63.4
1991	74.0	68.7
1992	72.7	74.3
1993	75.9	76.9
1994	79.3	76.7
1995	82.8	80.8

Table A4: Results of auxiliary analysis of status of last partner (steady versus non-steady) for all apprentices aged 24 years or younger.

Independent variable (reference category)	OR	t*	p-value
Sex (male respondents)	2.59	10.09	<.001
Education (less than year 10)		F=4.62	.006
Year 10	1.93	2.62	.032
Year 11	2.23	3.13	.008
Year 12	2.89	3.67	.002
Living arrangements (with parents)		F=17.56	<.001
Alone	.40	-2.56	.051
With partner	3.86	5.05	<.001
With friends	.46	-5.58	<.001
Combination household	1.13	0.33	1.00
Time since last intercourse (in last week)		F=95.93	<.001
In last fortnight	.40	-5.68	<.001
In last month	.18	11.99	<.001
One to six months ago	.13	-16.11	<.001
Six to twelve months ago	.16	-7.54	<.001
Age	.93	-0.70	.300
Years since left school	1.15	2.18	.064

Notes: Model significance, $F_{14,501}=107.83$, $p<.001$, $R^2=24.6\%$.

t*-t is derived from original coefficient of the category versus the reference category and its standard error

APPENDIX 3: THE QUESTIONNAIRE

SURVEY OF TAFE STUDENTS AND HIV

This questionnaire aims to find out how much is known about HIV/AIDS by students attending TAFE. It is **not** compulsory - so if there are some sections or questions you do not feel comfortable answering, you do not have to answer them. This questionnaire will not affect your marks or participation in this course. If you do not know an answer to a question, just tick the "not sure" box rather than trying to guess or leaving a blank.

The survey will be done throughout all of Australia and the results will provide information about the *sexual* health of young people. Some of the questions are very personal and will ask you about your sexual experiences. We need this information to see how people's sexual experiences relate to their knowledge and attitudes about HIV. However, what you think is still important whether or not you are sexually active. Because this information is personal, **do not** write your name or student number on this questionnaire. No one at your college or work will see the answers that you give. The only people who will see your answers are the researchers who will not know which questionnaires belonged to which person. In order for us to be able to make worthwhile conclusions, we would like you to answer the questions honestly as possible. Remember, all information will remain anonymous.

Please work through the whole survey and follow the directions on the questionnaire as to which questions to leave out. Please answer as honestly as possible.

Thank-you very much for being part of this research, your co-operation is much appreciated.

Anne Grunseit and (Associate Professor) Susan Kippax

SOME DEFINITIONS YOU MAY NEED TO KNOW

HETEROSEXUAL:	female-with-male OR male-with-female relationship
HOMOSEXUAL:	female-with-female OR male-with-male relationship
CASUAL PARTNER:	someone who you have sex with once or not very often, and you don't have a steady relationship with
REGULAR PARTNER:	someone you have sex with regularly and/or you have a steady relationship with
ABSTINENCE:	not having sex

SECTION A

1. What is your sex? ☐ Male ☐ Female

2. What is your age? Years..... Months.....

3. In which country were you born? ☐ Australia ☐ Other (please write).....

4. If English is not the language spoken at home, what language is spoken at home.....

5. With whom do you live?
   ☐ Alone ☐ Parents/Guardian ☐ With a sexual partner
   ☐ With friends/others about your age ☐ Other (please specify).....

6. What is the post-code where you live?.....

7a. Are you enrolled in the apprenticeship of: ☐ Cooking ☐ Motor Mechanic ☐ Hairdressing

7b. When did you start WORKING as an APPRENTICE? (write month & year you started, eg Jan. 93).....

8. When did you start coming to TAFE for this course?
   ☐ Before 1993 ☐ Early 1993 ☐ Late 1993 ☐ Early 1994 ☐ Late 1994 ☐ 1995 Other.....

9. Have you done any other courses before this? (eg. Another TAFE or university course?) Yes ☐ No (go to Q10)

9a. If YES please write the name of this/these course(s).....

10. What is the HIGHEST level of school you went to?
   ☐ Some primary ☐ Left before Yr 10 ☐ Yr 10 ☐ Yr 11 ☐ Yr 12

11. What was the LAST year you were at school? 19.....

12. What is the highest level of education your MOTHER has reached?
☐ Some primary school ☐ Some high school ☐ Yr 10 school certificate/leaving certificate
☐ Yr 12/Higher School Certificate ☐ Trade certificate ☐ University degree ☐ Don't know/not sure

13. What is your MOTHER'S current job (eg. teacher, sales): ☐ Not applicable .....
.....

14. What is the highest level of education your FATHER has reached?
☐ Some primary school ☐ Some high school ☐ Yr 10 school certificate/leaving certificate
☐ Yr 12/Higher School Certificate ☐ Trade certificate ☐ University degree ☐ Don't know/not sure

15. What is your FATHER'S current job? (eg. teacher, sales): ☐ Not applicable .....
.....

16. What is your religion?
   ☐ None (go to section B) ☐ Catholic ☐ Protestant ☐ Anglican (Church of England, C of E)
   ☐ Jewish ☐ Don't wish to say ☐ Other.....

16a. If you have a religion, how often do you attend church or other place of worship? At least...

☐ Never ☐ Weekly ☐ Fortnightly ☐ Monthly ☐ 3-monthly ☐ Annually ☐ Yearly or less

16b. How important is your religion to you?

☐ Not important ☐ A little important ☐ Quite important ☐ Very important

SECTION E

We are now going to ask you some questions about HIV. Please put a tick in the box that is closest your answer. If you are not sure, please mark the "don't know" box, rather than guessing or leaving a blank.

	YES	NO	NOT SURE
Can a person get HIV by sharing a needle and syringe with someone else when injecting drugs?	☐	☐	☐
Can a woman get HIV through having sex with a HETEROSEXUAL man?	☐	☐	☐
Can a person catch HIV from mosquitoes?	☐	☐	☐
Does the birth control pill protect a person from getting HIV?	☐	☐	☐
If a woman with HIV is pregnant, could her baby become infected with HIV?	☐	☐	☐
Could a man get HIV from having sex with a HOMOSEXUAL woman?	☐	☐	☐
Could someone who looks very healthy be infected with HIV?	☐	☐	☐
If a person gets HIV through shaving accident, can they pass it on to someone else through sex?	☐	☐	☐
Is it a law that people who have HIV have to tell their sexual partners that they are infected?	☐	☐	☐
Is it a law that a person with HIV must tell their employer that they are infected?	☐	☐	☐
Once a person is infected with HIV, can they pass it on to someone else for the rest of their life?	☐	☐	☐
Is having HIV the same as having AIDS?	☐	☐	☐
Could a person get HIV from sharing a cup or cutlery with some who is infected with HIV?	☐	☐	☐
If a person is infected with HIV, will it always show up on an HIV-antibody test (AIDS test)?	☐	☐	☐
Could a woman become infected with HIV by having sex with a BISEXUAL man?	☐	☐	☐
Could a man become infected with HIV by having sex with a BISEXUAL woman?	☐	☐	☐
Can a person become infected with HIV while DONATING blood?	☐	☐	☐
Is washing a good precaution for using with condoms?	☐	☐	☐
Should a person squeeze the end/tip of a condom before putting it on a man's penis?	☐	☐	☐

SECTION C

The next two sections are on your SEXUAL EXPERIENCES with the OPPOSITE SEX, that is HETEROSEXUAL EXPERIENCES. Some people may find it uncomfortable to think about some of their sexual experiences, especially early ones. If you do not wish to answer any or all of these questions because it makes you uncomfortable please go to SECTION E.

These questions are about your sexual activities with a partner of the OPPOSITE sex only

1. Have you ever had vaginal intercourse?	☐ YES	☐ NO	☐ I DON'T UNDERSTAND
2. Have you ever given oral sex? (your mouth on a partner's genitals)	☐ YES	☐ NO	☐ I DON'T UNDERSTAND
4. Have you ever received oral sex? (a partner's mouth on your genitals)	☐ YES	☐ NO	☐ I DON'T UNDERSTAND
5. Have you ever had anal sex?	☐ YES	☐ NO	☐ I DON'T UNDERSTAND

If you answered NO to ALL of these questions, please go to section E.

FIRST INTERCOURSE

6. At what age did you first have sexual intercourse (either vaginal or anal)? (please write) ..... years

7. How old was your partner at that first time? (please write) ..... ☐ Don't know/not sure

8. When you had intercourse that first time, did you or your partner take any precautions (tick all that were used)

☐ No, nothing done to aim ☐ Condom ☐ I withdrew/my partner withdrew before coming
☐ Diaphragm ☐ Pill/shot ☐ Spermicide ☐ Safe time in my/my partner's cycle ☐ I didn't use anything, just took chance (try pregnant)
☐ The 'pill' Other _____

8b. Did you use this for... ☐ STI control ☐ STI/HIV prevention ☐ Both

9. Which one of these descriptions applies best to YOU and YOUR PARTNER at your first time of intercourse?

☐ We had just met for the first time ☐ We had met recently
☐ We had known each other for a while, but didn't have a steady relationship ☐ Steady relationship
☐ A prostitute ☐ Other (please write) .....

10. Which of these statements is closest to how that first time of having intercourse came about?

☐ It happened on the spur of the moment ☐ I expected it would happen soon, but wasn't sure when
☐ I expected it to happen at that time ☐ I planned it to happen at that time
☐ We planned it together beforehand ☐ Other .....

SECTION D

The next section is about sexual activity with the OPPOSITE SEX ONLY. A CASUAL PARTNER is someone you have sex with ONCE or NOT OFTEN, and a REGULAR PARTNER is a steady partner.

2a. In the last 12 months, how many CASUAL partners have you had ANAL or VAGINAL sex with? _____ IF NONE, write a zero '0' and go to q 3)

b. How often have you used a CONDOM with your CASUAL partners in the last 12 months?

☐ Never ☐ Rarely ☐ Sometimes ☐ Half the time ☐ Often ☐ Almost always ☐ Always

2c. In the last 12 months, how many REGULAR partners have you had ANAL or VAGINAL sex with? ____ IF NONE, write a zero '0' and go to q 3)

d. How often did you use a CONDOM with your REGULAR partners in the last 12 months?

☐ Never ☐ Rarely ☐ Sometimes ☐ Half the time ☐ Often ☐ Almost always ☐ Always

3 How long ago was the LAST time you had VAGINAL sex?

☐ Never had vaginal sex (go to section E) ☐ Less than 1 week ago ☐ Less than 2 weeks ago
☐ Less than 1 month ago ☐ Between 1 & 3 months ago ☐ Between 3 & 12 months ago
☐ More than 1 year ago (go to section E) ☐ Don't remember (go to section E)

4. Thinking of the LAST time you had VAGINAL sex, which line best describes you and your partner?

☐ We met just now for the 1st time ☐ We met recently
☐ We had known each other for a while, but didn't have a steady relationship ☐ Steady relationship
☐ A prostitute ☐ Other (please write) _____

5 Thinking of the LAST time you had VAGINAL sex, what PRECAUTIONS did you use? (tick as many as you used)

☐ No, nothing (go to q6) ☐ Condom ☐ withdrawal/my partner withdrew before coming
☐ Depo/norigen ☐ IUD/coil ☐ spermicide ☐ Safe time in my/my partner's cycle ☐ I didn't use anything, but trust my partner
☐ The pill Other (please write) _____

6 Did you use this for.... ☐ Contraception ☐ STI/HIV prevention ☐ Both

SECTION E

We would like you to answer some questions about condoms. Please indicate with a tick how much you agree or disagree with each statement.

	strongly disagree	disagree	agree	strongly agree	not sure
I find condoms easy/ safe to use	☐	☐	☐	☐	☐
Condoms reduce sexual pleasure for me	☐	☐	☐	☐	☐
Condoms reduce sexual pleasure for my partner	☐	☐	☐	☐	☐
Condoms take away spontaneity in sex	☐	☐	☐	☐	☐
I would find it easy to convince a partner to use condoms when they didn't want to	☐	☐	☐	☐	☐
I don't like to carry condoms with me	☐	☐	☐	☐	☐

Section 5

These are some things that some people have said about other people and HIV. Please say how much you agree or disagree by putting a tick in the box under your answer. Remember, there are no right or wrong answers, just your opinion.

	strongly disagree	tend to disagree	don't know	tend to agree	strongly agree
Children with HIV have a right to continue attending their schools.	☐	☐	☐	☐	☐
If someone is infected with HIV, their employer would be justified in sacking them.	☐	☐	☐	☐	☐
Life insurance companies would be within their rights in refusing to issue homeowners or life insurance to people who might die from an AIDS-related illness.	☐	☐	☐	☐	☐
If my child's school teacher is a homosexual, I should have the right to know.	☐	☐	☐	☐	☐
People with HIV should be isolated from the rest of the community.	☐	☐	☐	☐	☐
People with HIV have the same rights to housing, employment and health care as anybody else.	☐	☐	☐	☐	☐
There should be a law to deal with people who infect their partner's and maybe their babies with HIV.	☐	☐	☐	☐	☐
AIDS patients should be given the same medical care as anyone else who is seriously ill.	☐	☐	☐	☐	☐
Gay (homosexual) health professionals should provide all the treatment for AIDS patients.	☐	☐	☐	☐	☐
If someone I know gets HIV, I ought not to care how they got it, I ought to care about how I can help them.	☐	☐	☐	☐	☐
When you think about HIV and AIDS, you can understand why 'gays' get bashed.	☐	☐	☐	☐	☐
People infected with HIV have the right to a full and satisfying sex life.	☐	☐	☐	☐	☐
Most people with HIV and AIDS have got it through their own fault.	☐	☐	☐	☐	☐
HIV and AIDS are a direct consequence of unnatural acts.	☐	☐	☐	☐	☐
Doctors, nurses, dentists and other health care workers should have the right to refuse to treat people infected with HIV.	☐	☐	☐	☐	☐
My feelings about someone who is infected with HIV would depend on how they got the virus.	☐	☐	☐	☐	☐

A. Have you ever injected drugs intravenously? ☐ Yes ☐ No (go to section 6)

B. Have you injected drugs in the last 12 months? ☐ Yes ☐ No

C. Have you ever shared needles while injecting drugs? ☐ Yes ☐ No

please turn to FINAL page →

SECTION C

1. Do you think of yourself as mostly.....

☐ Heterosexual ☐ Bisexual ☐ Homosexual ☐ Other (please specify)_____

2. I think a REGULAR PARTNER would be someone with whom I have had a relationship with for (HOW LONG)?

☐ At least one week ☐ 2-4 weeks ☐ 1-2 months ☐ 3 months ☐ 4-6 months ☐ 7-12 months ☐ A year or more

3. If you were getting married, what is the highest number of PAST sexual partners you would find it acceptable for your future husband/wife to have had? (please write number here)_____ ☐ Doesn't matter

4. How many people of your age do you think always use condoms for vaginal sex in steady relationships?

☐ None or only a few ☐ About ¼ ☐ About ½ ☐ About ¾ ☐ Almost all ☐ Not sure

5. How many people of your age do you have always use condoms for vaginal sex in casual relationships?

☐ None or only a few ☐ About ¼ ☐ About ½ ☐ About ¾ ☐ Almost all ☐ Not sure

6a) In a relationship with a REGULAR partner would YOU.....

☐ Be totally faithful, and not have any other sexual partners ☐ Sometimes have other sexual partners while still seeing your regular partner

b) In a relationship with a REGULAR partner would you expect YOUR PARTNER to.....

☐ Be totally faithful to you, and not have any other sexual partners ☐ Sometimes have other sexual partners while still seeing YOU

SECTION D

7. Have you ever had sexual contact with someone of the same sex as you?

☐ No ☐ Yes, but not in the last year ☐ Yes, in the last year

8. Have you ever had an HIV antibody (AIDS test) test?

☐ No, never ☐ Yes, because I chose to ☐ Yes, because I had to ☐ I'm not sure if I have had a test

9. Which of the following topics did you get TAUGHT AT SCHOOL? (tick all that you had lessons on)

☐ Sexuality ☐ Relationships ☐ Abstinence ☐ Contraception (birth control)

☐ STDs (not HIV) ☐ HIV/AIDS ☐ Abortion ☐ Sex and same gender issues

☐ Values around sex ☐ Skills for creating pressure to have sex

☐ Practical demonstration of how to use a condom properly ☐ Religion and sex

10. Which of the following topics would you have liked more of AT SCHOOL? (tick all that you wanted more information on)

☐ Sexuality ☐ Relationships ☐ Abstinence ☐ Contraception (birth control)

☐ STDs (not HIV) ☐ HIV/AIDS ☐ Abortion ☐ Sex and same gender issues

☐ Values around sex ☐ Skills for creating pressure to have sex

☐ Practical demonstration of how to use a condom properly ☐ Religion and sex

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

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